

ABSTRACT

A proxy implements automated version management of objects embedded in a document to eliminate/reduce network delays associated with requests to validate the objects in a browser (or other) cache. In an exemplary embodiment, the proxy obtains the document, assigns a unique URL to an embedded object, assigns an extended cache life to the object (via a header), updates the object's URL reference in the document, and sends the modified document to the user. When the user requests the object, the proxy obtains the object, attaches the new header, and transmits the object to the user. Because of its extended cache life, the object can subsequently be reused without time-consuming validation with the content server. In another embodiment, storage and validation of objects at the proxy (rather than at the cache) achieves reduced (and faster) validation while allowing refreshing prior to expiration.